

## ABSTRACT

## POWER AMPLIFIER (PA) WITH IMPROVED POWER REGULATION

A circuit for regulating the power provided to a load connected to an output of a power amplifier. The circuit includes an amplitude detector that outputs a voltage corresponding to the amplitude of the signal outputted by the power amplifier. This output voltage is a function of the impedance of the load. Thus, when the impedance of the load changes, the output voltage also changes. Given a constant current into the load, it is the load impedance that determines the power delivered to the load. Therefore, because the output voltage reflects changes in the impedance of the load, the output voltage can be used by a regulator circuit to maintain a constant output power, regardless of changes in the impedance of the load.

Restondocs:22677.4(hhx04!.DOC)

RES 41768v3